

# Dell Response to "Leap Second" issue [updated 28 November 2016, originally posted 31 March 2015]

## **Technical Summary**

A leap second is a periodic one-second adjustment of Coordinated Universal Time (UTC) in order to keep a system's time in synch with the mean solar time. Leap seconds do not occur regularly. The last leap second was added on 30 June, 2015 at 23:59:60 UTC. The next leap second will be at the end of 31 December, 2016 at 23:59:60 UTC.

Some Linux versions were previously unable to handle the insertion of a leap second, but have been patched. Note: Windows products are not affected.

### **Conditions/Requirements**

All three of the following must be in use to be open to the issue:

- Using a Linux operating system with the older kernel version that has not been patched
- Use of NTP server
- Use of NIST NTP leap second tables
  - Note: Leap second tables are optional, and must be loaded by the IT Admin

#### **Dell Response**

While there are a few Dell products that ship with the older versions of the Linux kernel, our current analysis of these products show that they are not affected by this issue. This conclusion is based on considerable testing using tools to simulate leap second.

While iDRAC7 and CMC do meet the criteria listed above, there is no issue noted with leap second. These programs will take ~9 minutes to re-sync time, if there is any change in NTP server time. There is no loss of functionality during this time.

UNAFFECTED PRODUCTS	
PRODUCT	VERSIONS
DRAC5	All
iDRAC6 with Lifecycle Controller	All
iDRAC7 with Lifecycle Controller	All
iDRAC8 with Lifecycle Controller	All
Chassis Management Controller (CMC)	All
Baseboard Management Controller (BMC)	All
OpenManage Integration with VMware vCenter	All
Dell Lifecycle Controller Integration (DLCI) for Microsoft System	
Center Virtual Machine Manager (SCVMM)	All
Dell Tool Kit (DTK)	All

Active System Manager (ASM)	All
Dell iDRAC Service Module (iSM)	All
Dell Connectors for CA/IBM/HP	All
Dell Plug-in for Oracle Enterprise Manager	All
Dell OpenManage Server Administrator (OMSA)	All
Dell OpenManage Power Center (OMPC)	All
Dell OpenManage Mobile (OMM)	All
Dell OpenManage Essentials (OME)	All
Dell Repository Manager	All
Dell YUM Repository	All
Dell Update Package (DUP)	All
Dell System Build and Update Utility (SBUU)	All

## **Dell Best Practices regarding iDRAC**

DRAC's are intended to be on a separate management network; they are not designed nor intended to be placed on or connected to the internet. Doing so could expose the connected system to security and other risks for which Dell is not responsible.

Along with locating DRACs on a separate management subnet, users should isolate the management subnet/vLAN with technologies such as firewalls, and limit access to the subnet/vLAN to authorized server administrators.

## **Dell Best Practices regarding OS/hypervisors**

Dell advises reviewing and updating your OS/hypervisor as per your vendor's recommendation.